



*Promoting Wellness Across the Nation*

## **Using Best Evidence to Promote Population Health and Wellness in Academic Institutions and Their Surrounding Communities**

Bernadette Mazurek Melnyk, PhD, RN, CPNP/PMHNP, FAANP, FNAP, FAAN

If we want more energy throughout the summit,  
we need to *MOVE!*

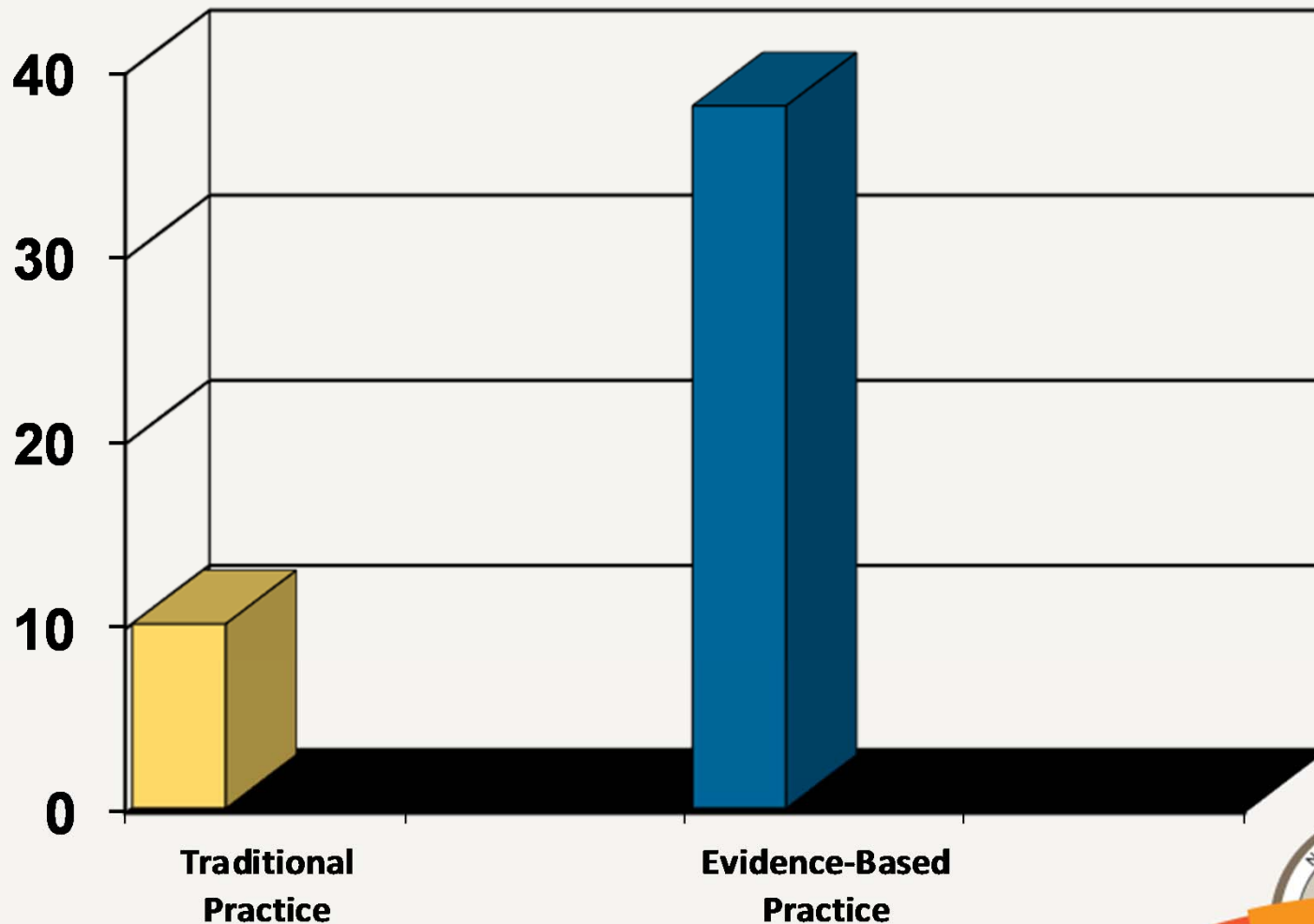
Let's give each speaker today active applause  
***both before*** and ***after*** they speak



**In God We Trust,  
Everyone Else Must  
Bring Data!**



# Health Outcomes With and Without Evidence-Based Practice



# Why Must We Accelerate EBP?

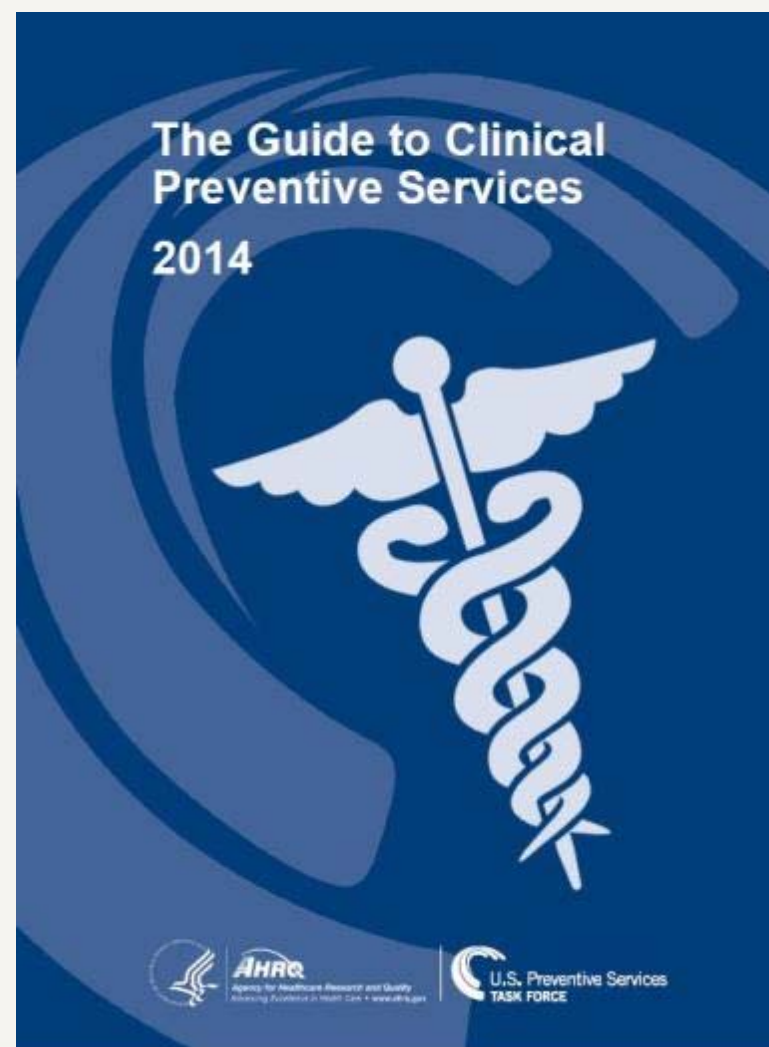
Despite an aggressive research movement, the majority of findings from research often **are not** integrated into practice

- It often takes decades to translate research findings into real world settings due to multiple barriers, including cultures of “*this is the way we do it here.*”



# Annual Guide to Clinical Preventive Services

- Evidence-based gold standard recommendations adapted for a pocket-sized book
- Formatted for clinicians to consult for clinical guidance in their daily practice
- Recommendations are presented in an indexed, easy-to-use format with at-a-glance charts



# Why Must We Accelerate EBP?

## ❖ Tongue Patch for Weight Loss



# Why Must We Accelerate EBP?

- **A high JASPA score**  
(Journal of Associated Score of Personal Angst)

**J:** Are you ambivalent about renewing your Journal subscriptions?

**A:** Do you feel Anger toward prolific authors?

**S:** Do you ever use journals to help you Sleep?

**P:** Are you surrounded by piles of Periodicals?

**A:** Do you feel Anxious when your journals arrive?

Modified from BMJ (1995), 311, 166-1668





# The *So What* Factor in an Era of Healthcare Reform

- Conducting research and EBP projects with high impact potential to positively improve people's health outcomes and reduce costs
- Key questions when embarking on a study or an EBP project:

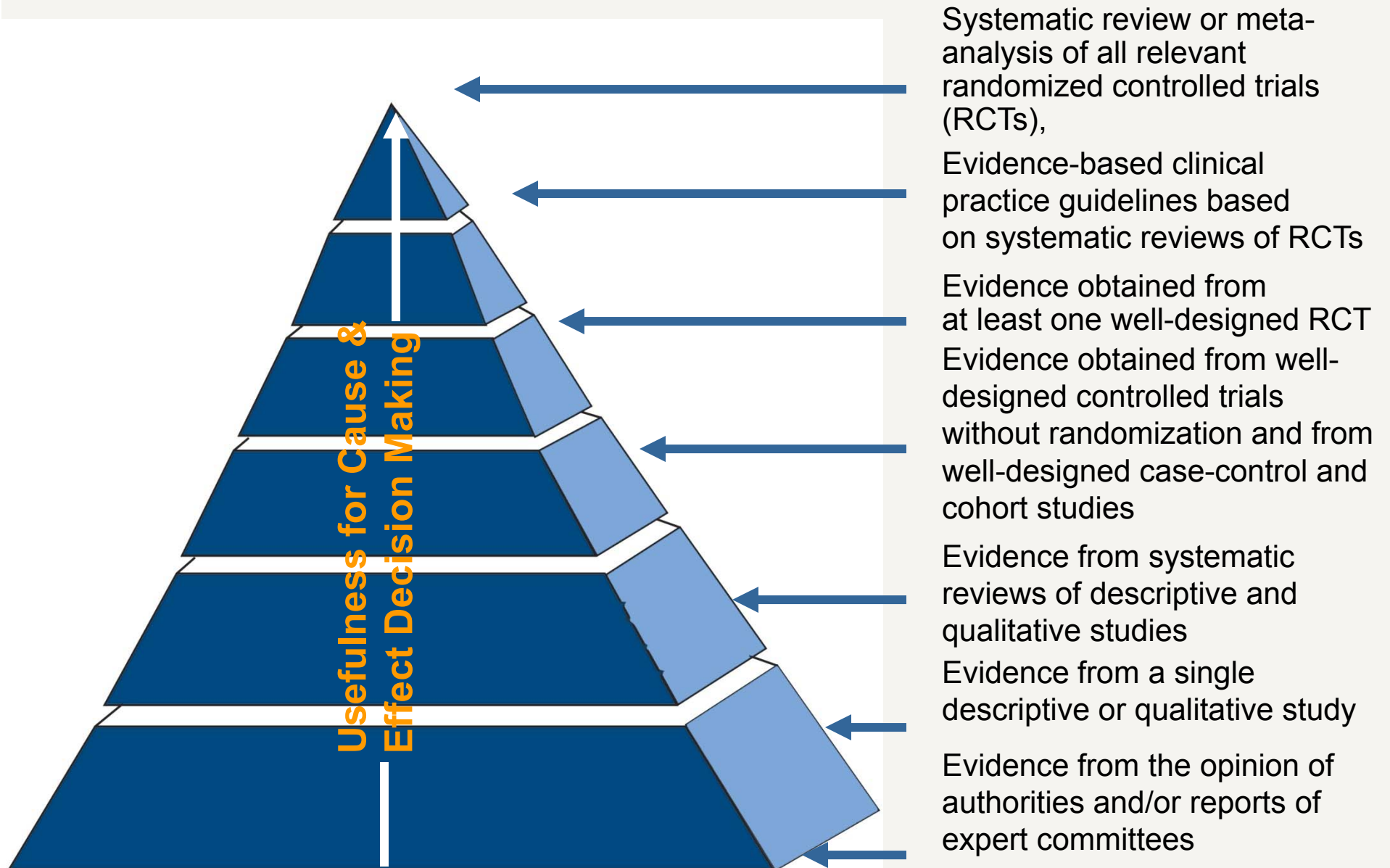
***So what*** will be the end outcome of the project once completed?

***So what*** hard outcomes will be measured that will demonstrate a return on investment?

***So what*** difference will the study or project make in improving health outcomes and reducing costs?



# Levels of Evidence



# Levels of... Chocolate



***“Inspirational quotes are fine, but you’ll motivate more people with chocolate.”***

# Current State of Health in the U.S.

- **Behaviors are the number 1 killer of Americans**, due to smoking, overeating, lack of physical activity, alcohol and drug use, non-adherence to medications and suicidal gestures
- Overweight/obesity will soon surpass tobacco as the number one cause of preventable death and disease in the United States; 42% of Americans will be obese by 2030 (CDC, 2012); 1 out of 3 Americans will have diabetes by 2050
- One of out 2 Americans have a chronic disease
- One out of 4 Americans have a chronic disease



# What Does The Evidence Tell Us?

**People Across the U.S. Today are Stressed & Depressed!**



One out of 4 individuals have a mental health problem, yet less than 25% receive treatment.

Depression and stress are poor predictors of health and wellness outcomes.

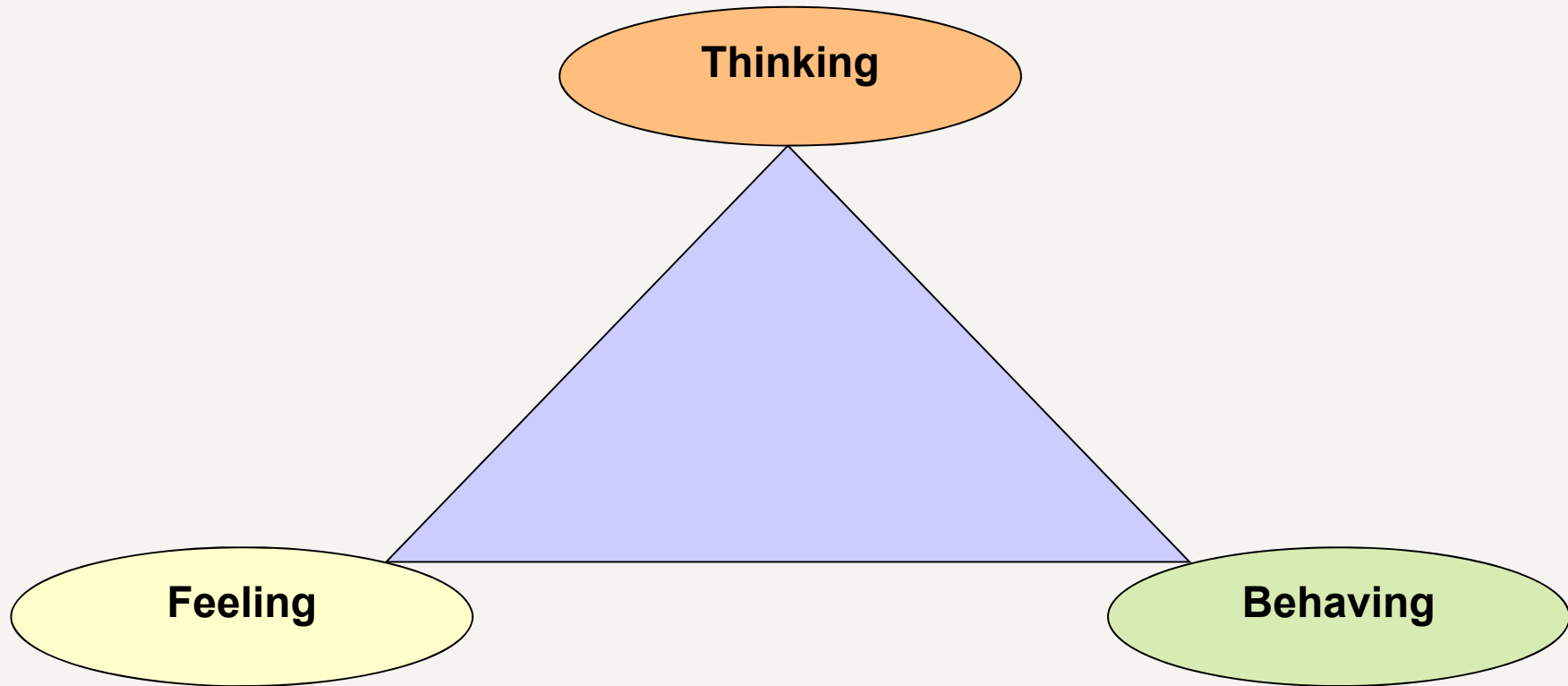
Suicide is the third leading cause of death in 14 to 24 year olds.

Children and adults who are overweight/obese have a higher prevalence of mental health problems.



# **Although Cognitive-Behavioral Therapy/Skills Building is the Best Evidence-based Treatment for Mild to Moderate Depression and Anxiety, Few Receive It**

The thinking/feeling/behaving triangle



# Relationships among Wellness Culture, Healthy Lifestyle Beliefs, and Healthy Behaviors in a Study of Nearly 4,000 Faculty and Staff

	Healthy Behaviors	Healthy Lifestyle Beliefs
Healthy Lifestyle Beliefs	.680 p<.001	
Wellness Culture	.207 p<.001	.326 p<.001





# We Have a Human Energy Crisis





# Energy Management Principles

Managing ENERGY, not just time, is the KEY to extraordinary results!

Full engagement is the acquired ability to intentionally invest your FULL and BEST energy, right HERE, right NOW.

Energy is four dimensional: Physical, Emotional, Mental, Spiritual (purpose).

Multitasking is the enemy of extraordinary energy.

Human energy oscillates, peaks in demand and recovery are important for top performance.

Human Performance Institute, Inc. (2010)



# Health Athlete

A Key Strategy for Enhancing Engagement and Energy  
as well as Reducing Stress, Fatigue and Burnout



# Great Energy Management Leads to Full Engagement and Accomplishing Your Mission



**Every Day, We Make Behavioral Choices.  
What Choices Will You Make Today?**

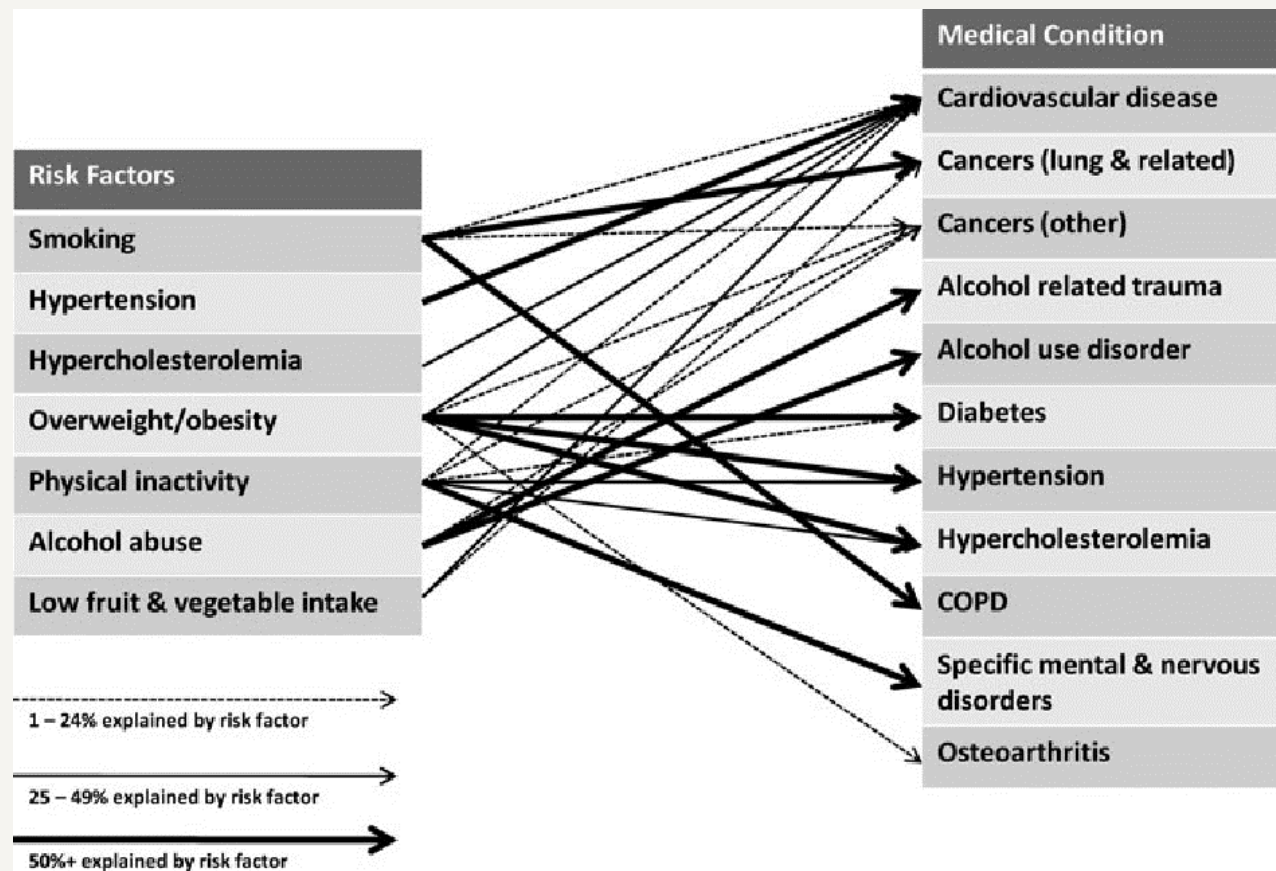




# What Will the Last 10 Years of YOUR Life Look Like?



# Risk Factors and Their Relationships with Medical Conditions. Darker Lines Indicate a Stronger Relationship



Bolnick, H., Millard, F. & Dugas, J.P. (2013). Medical Care Savings From Workplace Wellness Programs What Is a Realistic Savings Potential? *Journal of Occupational and Environmental Medicine*, 55(1), 4-9.

Promoting Wellness Across the Nation



# Based on Evidence What Do We Know?

People who have the following behaviors have 66% less diabetes, 45% less heart disease; 45% less back pain, 93% less depression, and 74% less stress

- **Physical activity**- 30 minutes 5 days per week
- **Healthy eating**- 5 fruits and vegetables per day
- **No smoking**
- **Alcohol in moderation**- 1 drink per day for women, 2 drinks per day for men



# **The Evidence is Irrefutable on the Effectiveness of Regular Physical Activity in The Primary and Secondary Prevention of Several Chronic Diseases**

- Cardiovascular Disease
- Diabetes
- Cancer
- Hypertension
- Obesity
- Depression
- Osteoporosis

**\*There is a linear relationship between PA and Health Status**

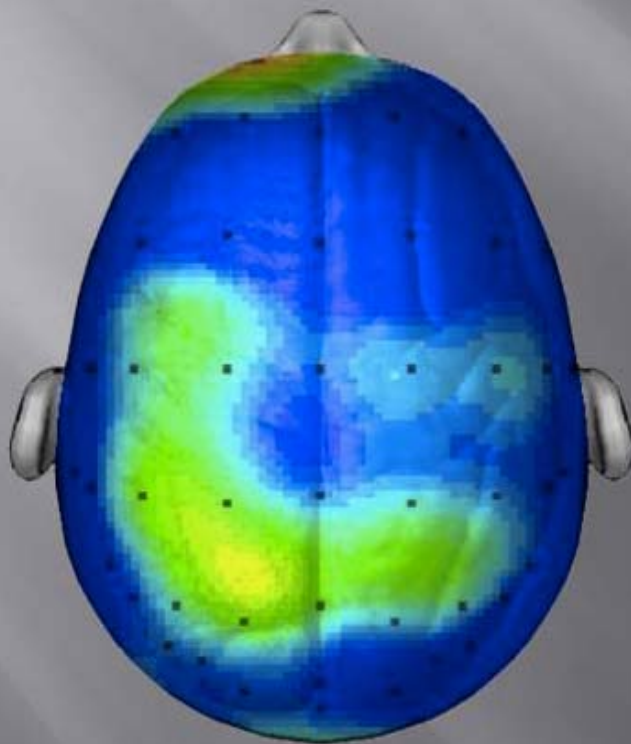
**\*The more PA, the more health benefits**



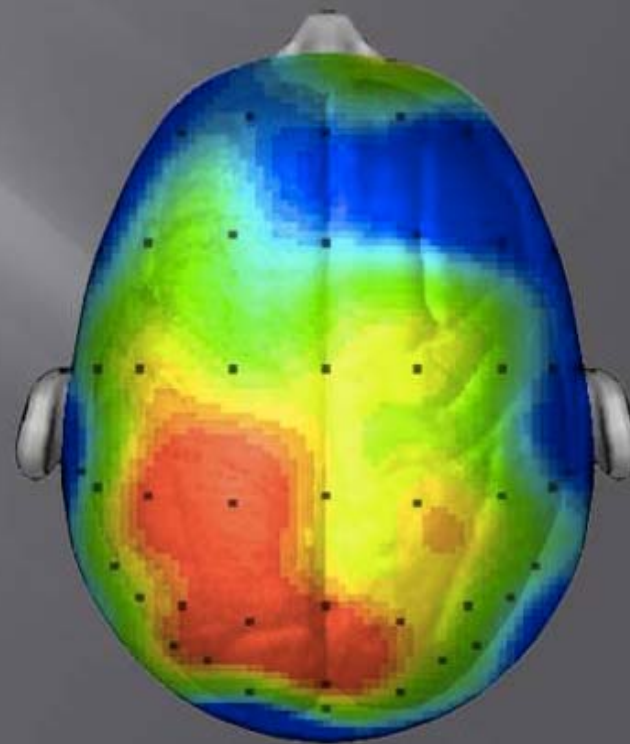


# Only 20 Minutes of Physical Activity Improves Brain Circulation and Functioning

BRAIN AFTER SITTING  
QUIETLY

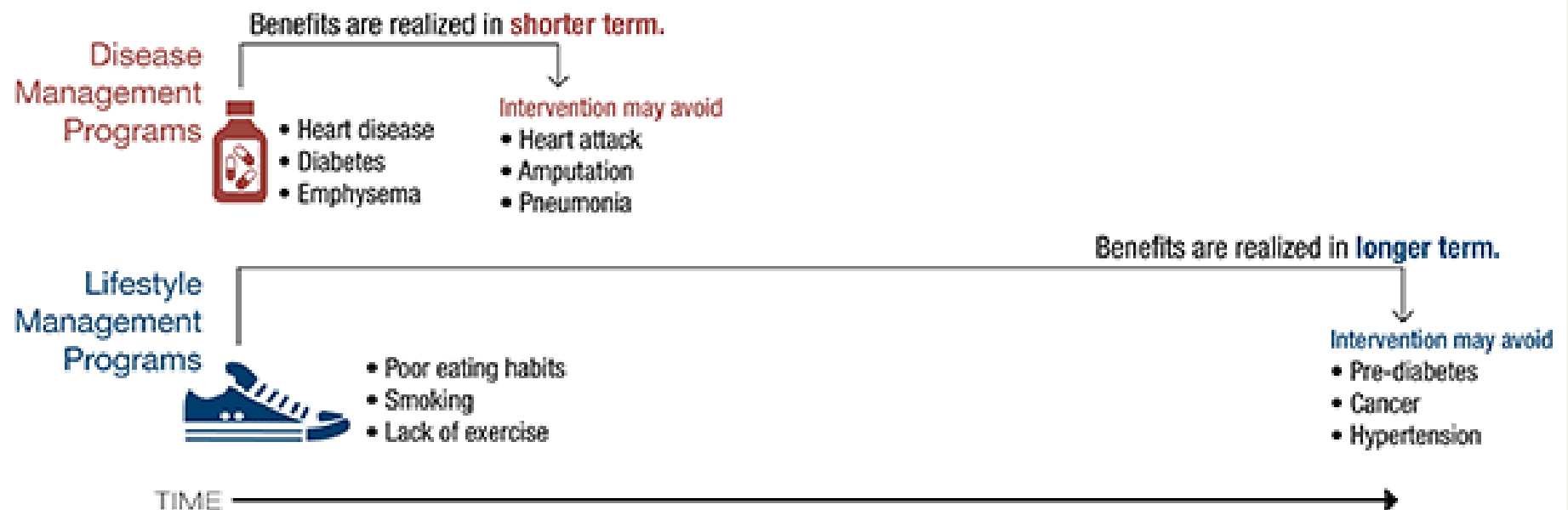


BRAIN AFTER 20 MINUTE  
WALK



Research/scan compliments of Dr. Chuck Hillman University of Illinois

# Disease Management Addresses Immediate Health Problems, Whereas Lifestyle Management Mitigates Longer-term Health Risks

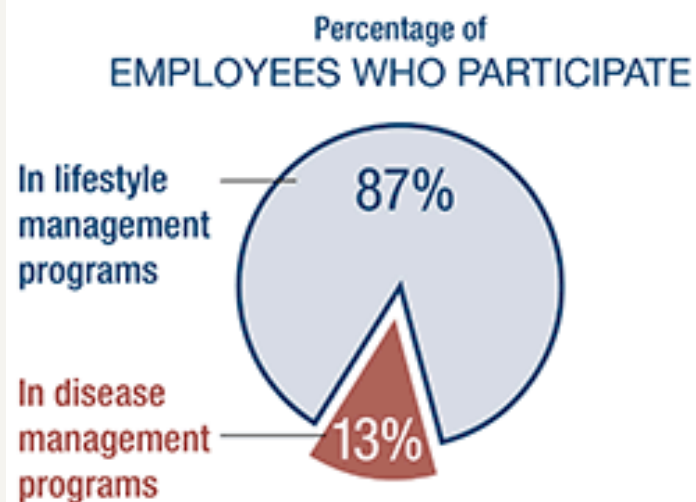


Mattke, S., Hangsheng L, Caloyeras, J., Huang, C. Y., Van Busum, K. R., Khodyakov, D., & Broderick, M. (2014). *Do Workplace Wellness Programs Save Employers Money?* Santa Monica, CA: RAND Corporation.

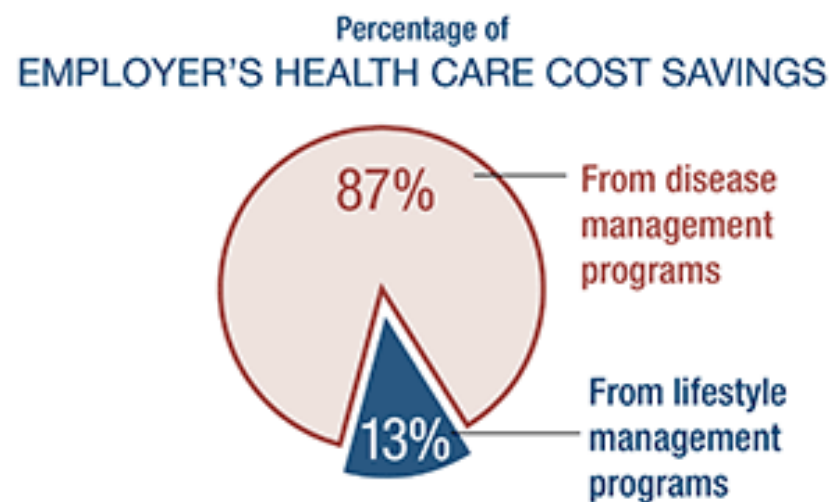


# More Employees Participated in the Lifestyle Management Program, but the Bulk of Health Care Cost Savings Came from the Disease Management Program

## PARTICIPATION



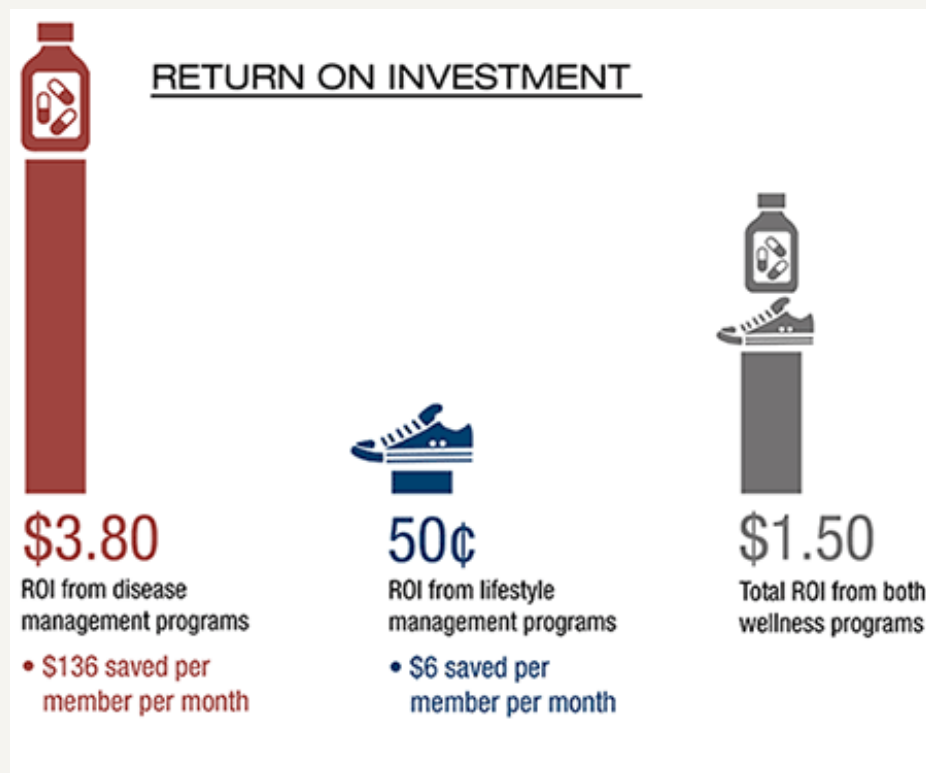
## SAVINGS



Mattke, S., Hangsheng L, Caloyeras, J., Huang, C. Y., Van Busum, K. R., Khodyakov, D., & Broderick, M. (2014). *Do Workplace Wellness Programs Save Employers Money?* Santa Monica, CA: RAND Corporation.



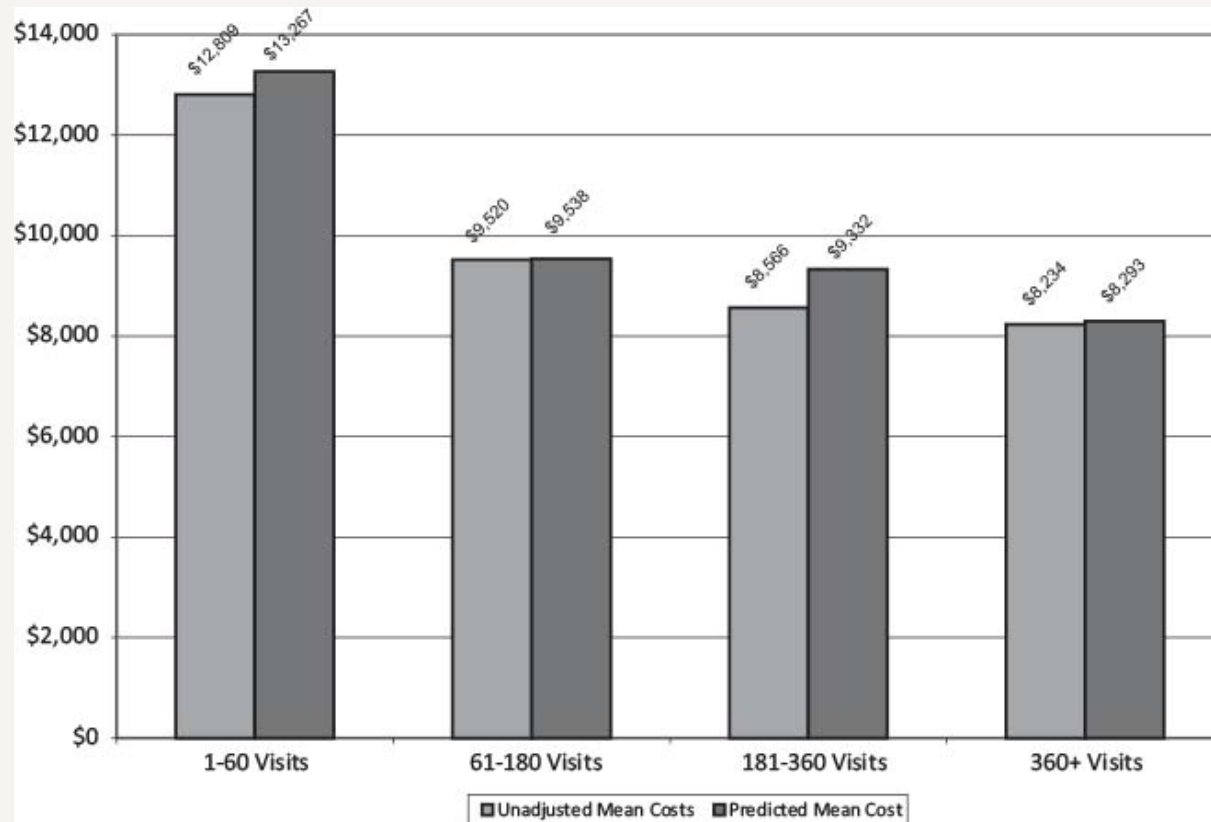
# Disease Management Provided a Much Greater Return on Investment than Lifestyle Management



Mattke, S., Hangsheng L, Caloyeras, J., Huang, C. Y., Van Busum, K. R., Khodyakov, D., & Broderick, M. (2014). *Do Workplace Wellness Programs Save Employers Money?* Santa Monica, CA: RAND Corporation.



# Unadjusted and Adjusted Mean Cost by Wellness Engagement Level at Mayo



Borah, B. J., Egginton, J.S., Shah, N.D., Wagie, A.E., Olsen, K. D., Yao, X., &(3) Lopez-Jimenez, F. (2015). Association of worksite wellness center attendance with weight loss and health care cost savings: Mayo Clinic's experience. *Journal of Occupational and Environmental Medicine*, 57(3), 229-233.



# What Works Based on the Best Evidence

- Comprehensive well designed health promotion programs that are built on a **culture and environment of health and wellness** that support individual efforts at changing lifelong health habits by putting in place policies, programs, benefits, management, and environmental practices that intentionally motivate and sustain health improvement
- Leader and middle manager role modeling and support
- Grass roots wellness initiatives that build a culture of wellness (e.g., wellness ambassadors/ innovators)
- Visual triggers at decision points
- Cultures that make healthy choices the default choices
- Incentives can stimulate short-term positive outcomes, but not long-term behavior change

In one minute,  
a 150 pound  
person burns  
approximately  
10 calories  
walking up stairs,  
and only 1.5  
calories riding  
an elevator.



# **According to Healthy People 2010, There are Five Components of Successful Worksite Health Promotion Programs**

1. Health education, focused on skill development and lifestyle behavior change along with information dissemination and awareness building.
2. Supportive social and physical environments, reflecting the organization's expectations regarding healthy behaviors and implementing policies promoting healthy behaviors.
3. Integration of the worksite program into the organization's benefits, HR infrastructure, and environmental health and safety initiatives.
4. Links between health promotion and related programs, like employee assistance.
5. Screenings followed by counseling and education on how to best use medical services for necessary follow-up.





# 2015 BHAC Summit Wellness Survey

## *Sample Demographics*

Number of respondents = 66

74% were from large 4 year institutions  
(over 10,000 students)

17% Faculty; 33% Staff

14% Administrators

35% Health Promotion Professionals

34% reported an on-campus employee health center





# Wellness Culture & Support of Health & Wellness

Individual Items	Min	Max	Mean
Do you believe your institution has a vested interest in your health and personal wellness?	1	5	3.63
Do you believe your institution has a culture and environment that promotes health and wellness for its faculty, staff, and students?	1	5	3.42
Do you believe the leaders at your institution are actively engaged in promoting and role-modeling health and wellness?	1	5	2.98
Do you think health and wellness programs are readily available to you at your institution?	1	5	3.47
Do you think that the communications you receive about wellness programs, activities, and services are clear?	1	5	3.43
Do you think that it is important for your institution to promote health and wellness for faculty, staff, and students?	1	5	4.86

# Wellness Culture & Support of Health & Wellness

Individual Items	Min	Max	Mean
Have you found it easy to engage in health and wellness programs and activities at your institution?	1	5	<b>3.37</b>
How satisfied are you with the current wellness programs and services offered at your institution?	1	5	<b>3.24</b>
To what degree does your unit/college support your participation in health and wellness activities and events?	1	5	<b>3.69</b>
To what extent do you believe your institution cares about your health and personal wellness?	1	5	<b>3.39</b>
To what extent do you agree with the statement, "I have a substantially higher overall well-being because of my institution"?	1	5	<b>2.73</b>



# Healthy Lifestyle Beliefs and Behaviors

	Mean	Std. Deviation
Healthy Lifestyle Beliefs	67.64	12.39
Healthy Lifestyle Behaviors	67.08	7.82

## **The highest reported healthy lifestyle behaviors were**

- Choosing water instead of a sugared beverage
- Regularly eating broiled or baked foods instead of fried foods

## **The lowest reported healthy lifestyle behaviors reported were**

- Exercising with my friends or family members
- Not adding salt to my foods



# The Data on PHAs and Tracking of Outcomes/Scorecards

- Only 58% of respondents said that their institutions offer a personalized health assessment
- Only 25 % of respondents reported that their institutions have a wellness scorecard
- Only 35.5% of respondents reported that their institution tracks faculty/staff health status or health outcome metrics



# Presence of Institutional Policies that Support Health and Wellness

- No smoking/tobacco – 68%
- Seat belt use in company vehicles – 44%
- Lactation – 59%
- Work leave/flex time – 61%
- Drug free workplace – 73%



# Health Screenings Offered to Employees at Institution

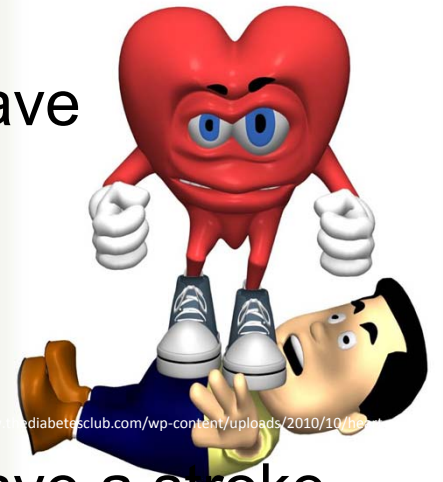
- Vision screening- 12%
- Hearing screening – 15%
- **Blood pressure screening – 47%**
- Cholesterol screening – 41%
- Prostate test (PSA) – 9%
- Pap smear – 6%
- Mammography – 15%
- Colorectal cancer screening – 11%
- Blood sugar/diabetes test – 32%





# Heart Disease

- Every 34 seconds, someone in the U.S. has a heart attack
- Each year, about 935,000 people in the U.S. have a heart attack
- Every 4 minutes, someone dies of a stroke
- Each year, about 795,000 people in the U.S. have a stroke
- Over 78 million adults in the U.S. have high blood pressure, yet 47% do not have it controlled to recommended levels; it is one of the most preventable causes of disease and death





## Million Hearts® Goals



Picture <http://hub.sierratradingpost.com/images/wpuploads/2009/03/healthy-choices-healthy-food.jpg>

- Prevent 1 million heart attacks and strokes by 2017
- Empower and educate Americans to make healthy choices
- Target care by focusing on the “ABCS”







## Know your ABCSS

- Appropriate Aspirin Therapy
- Blood Pressure Control
- Cholesterol Management
- Smoking Cessation
- Stress Reduction\*\*



\*\* Ohio State's additional "S"

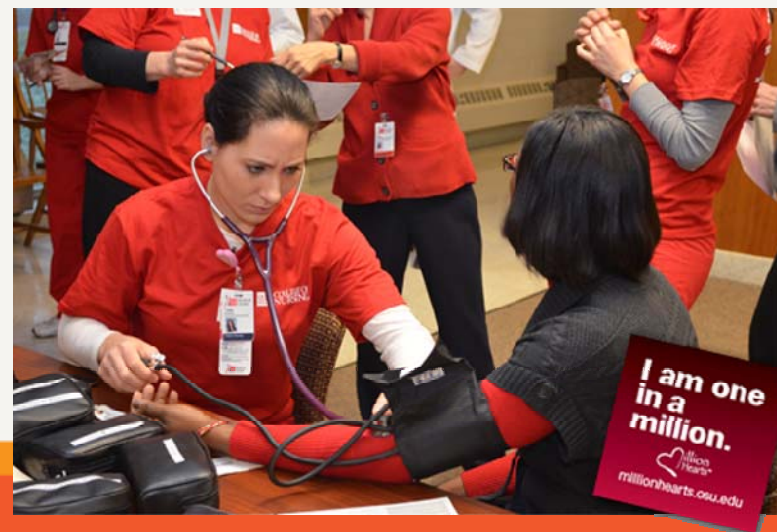


Picture <http://www.thediabetesclub.com/wp-content/uploads/2010/01/blood-pressure.jpg>



**Join the National Interprofessional  
Education and Practice Initiative to  
Advance Million Hearts®  
and become a Million Hearts® Fellow  
The Goal: To Educate and Screen  
100,000 People by 2017**

See information and access  
the free educational  
modules at  
<https://millionhearts.osu.edu>



# **The One Thing that Would Help You the Most to Participate in Health and Wellness Activities at Your Institution**

- Flex time or policy
- Convenience of wellness activities
- More offerings/variety/menu of options
- Decreased work load, work hours
- Incentives
- Better communication about activities/events
- Leadership buy-in



# **Greatest Barrier that Prevents Participation in Health and Wellness Activities at Your Institution**

- Lack of time
- Inadequate communication about available activities
- Organizational culture/lack of support
- Limited access to facilities and inconvenient times to engage in activities
- Heavy Workload



# Top Reasons for Attending the Summit

- Sharing of best practices - 67%
- Faculty/Staff Wellness education - 64%
- Networking – 58%
- Wellness Activities - 45%
- Student Wellness – 39%

84% of respondents reported interest in participating in the national consortium



# Activities of Most Interest in Being Provided by the National Consortium

- Evidence-based practices & benchmarking data – 63.6%
- Setting national standards for academic wellness – 57.6%
- Participating in nation-wide research and project evaluations – 54.5%
- Access to data sets generated by the consortium – 53.0%





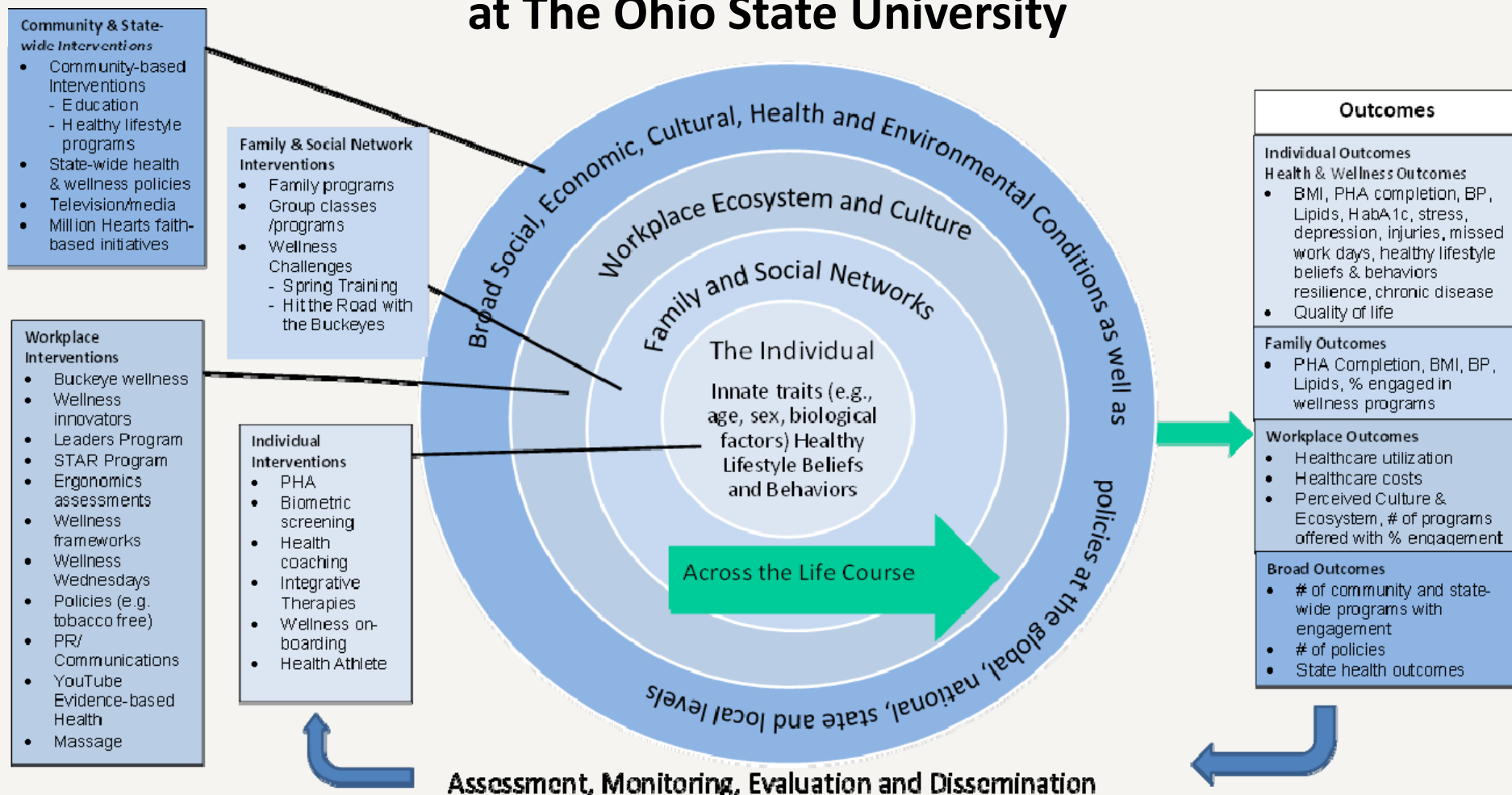
# HERO Comparisons

	#1	#2	#3	#4	#5	National Average	Maximum Points
Strategic Planning	13	13	10	11	14	10	20
Organizational & Cultural Support	34	27	18	35	21	23	50
Programs	33	28	29	30	32	22	40
Program Integration	11	3	10	8	7	5	16
Participation Strategies	37	23	24	29	28	21	50
Measurement & Evaluation	16	8	9	10	18	8	24

# The Social-Ecological Framework and Life-Course Perspective

## Guide Evidence-based Interventions to Achieve Positive Outcomes

### at The Ohio State University



Adapted from: Model to Achieve Healthy People 2020 overarching goals  
 Source: Secretary's Advisory Committee on Health Promotion and Disease Prevention Objectives for 2020 (2008, p. 7)

# SHOCK!

“You are asking me to engage regularly in wellness activities on top of everything else that I do?”



# Scorecard for Health and Wellness for Outcomes Monitoring

- **Culture and Environment of Health and Wellness**
  - CDC Worksite Scorecard
  - 11 Item Wellness Culture and Environment Scale (Melnik & Amaya, 2012)
- **Population Health Outcomes**
  - Prevalence data to show burden of illness
  - Incidence data to show rate of changes in burden of illness
  - Mental health data (PHQ and GAD-7)
  - Biometric Data (e.g., high blood pressure, high cholesterol, BMI)
- **Fiscal Health**
  - Per member Per Year (PMPY) costs of health insurance plans for faculty, staff and students
  - YP4H costs
  - Annual costs of absenteeism, presenteeism, and disability
  - Excess costs associated with obesity, hypertension, prehypertension, diabetes, pre-diabetes, depression and smoking



# When We Don't Have Evidence, We Must Innovate and Collect Outcomes

We also Must Make It Easy and Fun for Everyone to Engage in Healthy Behaviors



# Implications from the Evidence

- Multi-component/multi-sector interventions, including policies, are necessary to increase healthy behaviors in all settings
- It is critical for leaders and managers to support and role model wellness
- Mental health promotion must be integrated into interventions
- Incentives can stimulate short-term behavior change, but other evidence-based strategies are necessary for long-term change
- Cultures and environments must be built and sustained that make healthy choices the easy choices in all settings, including grass roots initiatives
- More high quality research, including longitudinal intervention studies and outcomes evaluations, is necessary in academic settings to inform policy and practice, including demonstrations of ROI
- We must make it easy and fun for people to engage in wellness activities across the institution and diffuse wellness into the units
- The research-practice translation gap must be shortened by rapid translation of evidence-based practices into the OSU community







“... because we’ve always  
done it that way.”



# Today, let's all commit to *Making Just 1 Change* for Your Own and Your Family's Wellness

- Decide to take the stairs instead of the elevator
- Drink water instead of a sugared beverage
- Hold 50 minute meetings instead of 60 minutes, and use the 10 minutes for a recovery break
- Read 10 minutes in a positive book every morning
- Take 5 slow deep breaths when stressed
- Sit less, stand more
- Laugh more



# Let's Continue to Dream, Discover and Deliver Wellness Across the Nation Together



# Contact Information

Bernadette Mazurek Melnyk

614-292-4844

[melnyk.15@osu.edu](mailto:melnyk.15@osu.edu)

Follow me on Twitter @bernmelnyk

Copyright, 2015



## Key References

Aldana, S.G., Anderson, D.R., Adams, T.B. et al. (2012). A review of the knowledge base on healthy worksite culture. *Journal of Occupational and Environmental Medicine*, 54(4), 414-419.

Baicker, K., Cutler, D., & Song, Z. (2010). Workplace wellness programs can generate savings. *Health Affairs*, 29(2), 304-311.

Carter, M.R., Kelly, R.C., Alexander, C., et al (2012). A collaborative university model for employee wellness. *American Journal of College Health*, 59(8), 761-763.

Goetzel, R.Z., Henke, R.M., Tabrizi, M. et al. (2014). Do workplace health promotion (wellness) programs work? *Journal of Occupational and Environmental Medicine*, 56(9), 927-934.

Hall, M.E., Bergman, R.J., & Nivens, S. (2012). Worksite health promotion program participation: A study to examine the determinants of participation. *Health Promotion Practice*, 15(5), 768-776.

Soler RE, Leeks KD, Razi S, et al. (2010). A systematic review of selected interventions for worksite health promotion. The assessment of health risks with feedback. *American Journal of Preventive Medicine*, 38:S237–S262.

